L&J Technologies

A COGNESENSE BRAND

MCG 7030

Touch Panel Alarm Monitor

The MCG 7030 Touch Panel Alarm Monitor provides centralized, real-time visualization and annunciation of alarm conditions across storage terminals and industrial facilities. It monitors up to 128 probes on a single 4-wire data highway, or 48 individually wired probes when used as a controller, supporting both wired MCG 1090 probes and wireless MCG 1095 probes. Designed for terminal operators, safety managers, and compliance teams, the 7030 consolidates alarm status, diagnostics, and history while offering multiple communication ports for integration with gauging, SCADA, or host systems.

Unlike basic alarm panels, the MCG 7030 functions as a remote data acquisition station and supports optional wireless high-level alarm systems with encrypted, frequency-hopping communication. Automatic self-testing, broad protocol support, and flexible wiring options give operators improved visibility, faster response capability, and assured regulatory compliance—all through a rugged, intuitive touch-panel interface.

Key Features

High-capacity monitoring

Supports up to 128 digital alarm probes on one 4-wire highway, enabling broad facility coverage without extensive additional wiring or distributed panels.

Wired or wireless compatibility

Works with MCG 1090 wired probes and MCG 1095 wireless probes, allowing mixed installations and simplifying upgrades across complex or phased projects.

Integrated data acquisition

Multiple communication ports forward alarms, diagnostics, and probe status to gauging or SCADA systems, improving visibility and centralizing alarm reporting.

Automatic self-testing

Performs continuous self-checking when paired with compatible probes, ensuring alarm integrity and reducing manual inspections or functional test requirements.

Easy configuration & integration

Touch-panel interface and standard industrial protocols simplify commissioning and allow seamless retrofit into both modern and legacy control architectures.

Secure wireless option

Optional frequency-hopping encrypted wireless link provides reliable, interference-resistant communication for independent high-level alarms in remote or hazardous areas.

Typical Applications

FIXED-ROOF STORAGE TANKS

Provides continuous monitoring of high-level or overflow conditions, giving operators real-time alarms that prevent spills, environmental violations, and unplanned shutdowns.

REGULATED CHEMICAL STORAGE

Supports certified alarm systems required by environmental rules, ensuring facilities maintain compliant overfill protection and auditable alarm history records.

FUEL AND TERMINAL OPERATIONS

Centralizes alarms from multiple tank areas, enabling quicker recognition of unsafe conditions and faster operational response to prevent product loss.

REMOTE OR UNMANNED SITES

Aggregates alarms into SCADA for remote visibility, reducing the need for onsite staffing while maintaining full safety and status awareness.

MIXED PROBE ENVIRONMENTS

Accommodates wired and wireless probes simultaneously, simplifying maintenance strategies and minimizing spare-parts requirements across diverse facilities.

HIGH-RELIABILITY ALARM SYSTEMS

Ideal where independent, self-checking high-level alarms are mandated to ensure redundant protection against overfills and other hazardous situations.

Benefits

Enhanced safety

Clear touch-panel visualization and immediate alarm annunciation reduce overfill risk and improve operator readiness during abnormal tank conditions.

Compliance assurance

Supports EPA high-level alarm requirements and provides self-testing capabilities that strengthen auditability and regulatory confidence.

Simplified integration

Multiple communication ports and standard protocols allow straightforward connection to existing wiring, reducing retrofit engineering and installation costs.

Operational efficiency

Wireless options minimize cabling, and automated diagnostics reduce manual checks, lowering field labor requirements and improving uptime.

Scalable architecture

Handles large probe counts on a single network highway, enabling growth without additional panels or major system reconfiguration.

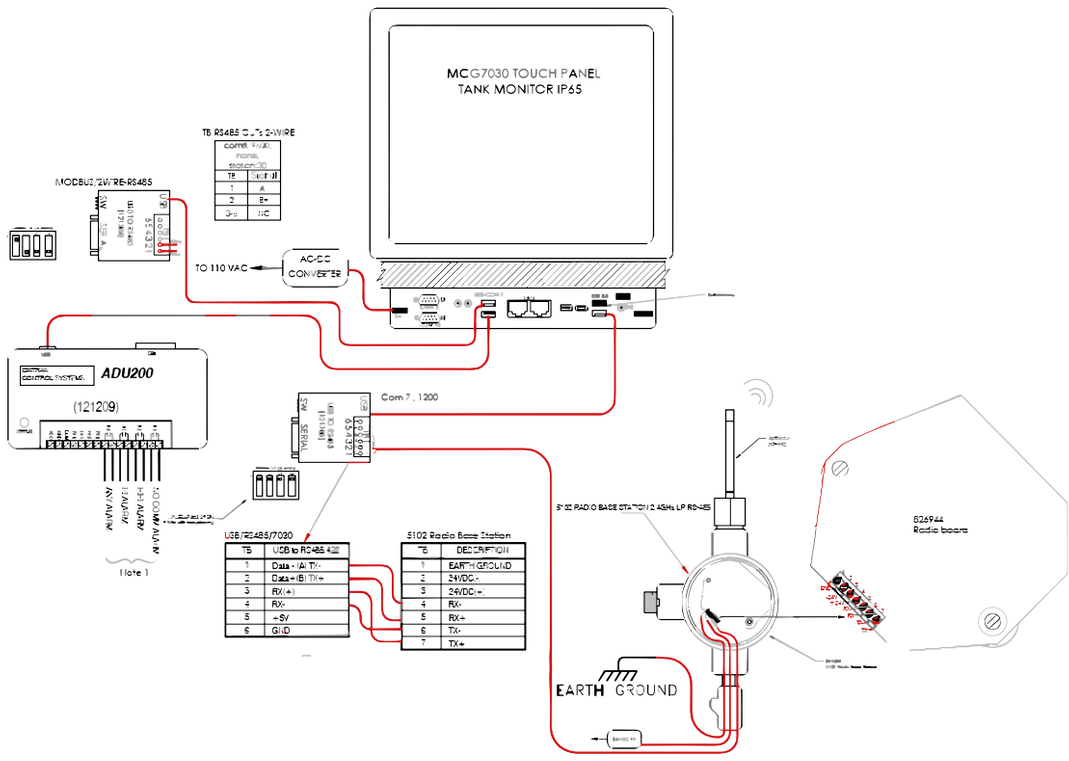
Flexible deployment

Supports individually wired probes where redundancy is required, offering tailored configurations for terminals with unique safety or reliability needs.

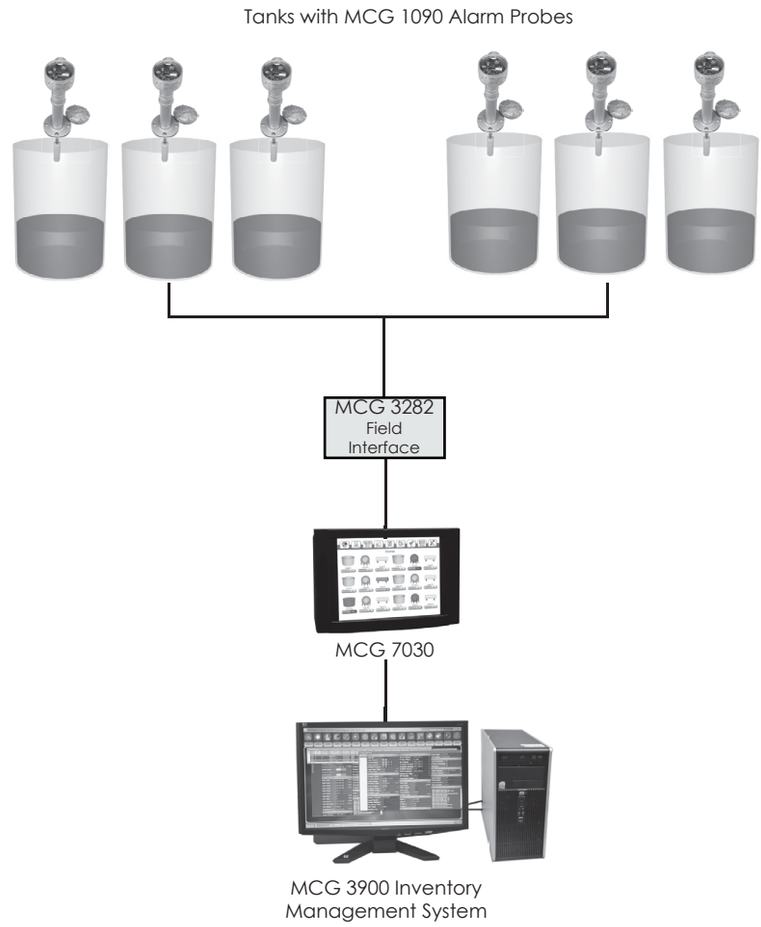
Technical Specifications & Key Features

Probe Capacity:	Up to 128 alarm probes on the 4-wire data highway; 48 individually wired when used as controller mode.
Probe Compatibility:	Works with MCG 1090 Level Alarm Probes (wired) and MCG 1095 Wireless Alarm Probes.
Communication Ports:	Multiple ports for wired output to host systems (Gauging / SCADA); supports standard industrial protocols.
Wireless Option:	Frequency hopping spread spectrum with custom encrypted protocol (for use with MCG 1095).
User Interface:	Touch panel monitor for local visibility of alarms and statuses.
Self-Testing:	Automatic testing features when paired with compatible probes; ensures system integrity.
Redundancy & Scalability:	Supports large probe counts; flexible wiring options.

Dimensions



Typical System Layout



Model Number Selection

The model number will consist of a base number MCG 7030 followed by 6 digits.
These digits will represent 5 sets of option tables:

A • NUMBER OF TANKS	
0	No Tanks, Remote Display Only
1	1 to 50 (Includes Field Interface)
2	51 to 100 (Includes Field Interface)
3	Wireless to MCG 1095 (Includes MCG 5102with NEMA 4 Housing)
4	1 to 50 (Includes Field Interface with redundant field power supplies)
5	50 to 100 (Includes Field Interface with redundant field power supplies)
6	Wireless to MCG 1097 (Requires MCG 5200)
7	1 to 50 (Field Interface Not Included)
8	51 to 100 (Field Interface Not Included)

B • REMOTE COMMUNICATION	
0	No Remote Communication
1	Modbus on RS-232
2	Modbus on RS-485 (2-Wire)
3	RS-232 To MCG 3900
4	Modbus Over Ethernet

C • REPORTING	
0	No Printed Reports
1	Printed Reports (Includes 8.5×11 Inkjet Printer)
2	Printed Reports (Includes 32 Character Thermal Printer)

D •	ANNUNCIATION
0	No Horn
1	External Horn (Relay Contact Only)

E •	POWER SUPPLY
1	110 VAC
2	220 VAC

F •	RELAY CONTACTS
0	No Relays
1	4 Relay Contacts
2	8 Relay Contacts
3	16 Relay Contacts
4	24 Relay Contacts

Summary

With decades of proven experience in tank gauging, level monitoring, and overfill protection, we design solutions you can trust. The MCG 7030 Touch Panel Alarm Monitor delivers dependable, scalable alarm detection and reporting—combining wired and wireless compatibility, real-time visibility, and safety-focused design. By choosing the 7030, operators gain confidence in their alarm systems, protection against overflow risks, and assurance that regulatory, operational, and safety standards are met — today and over the long term.

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